# Commonwealth of Kentucky Energy and Environment Cabinet Department for Environmental Protection Division for Air Quality 200 Fair Oaks Lane, 1<sup>st</sup> Floor Frankfort, Kentucky 40601 (502) 564-3999

# AIR QUALITY PERMIT Issued under 401 KAR 52:040

Permittee Name: Bowling Green Metalforming, LLC

Mailing Address: P.O. Box 10270

**Bowling Green, KY 42102** 

Source Name: Bowling Green Metalforming, LLC

Mailing Address: P.O. Box 10270

**Bowling Green, KY 42102** 

**Source Location:** 111 Cosma Drive

**Bowling Green, KY 42102** 

**Permit:** S-07-125 R1

Agency Interest: 47004

Activity: APE20080001 Review Type: State Origin Source ID: 21-227-00142

**Regional Office:** Bowling Green Regional Office

1508 Western Avenue

Bowling Green, KY 42104-3356

(270) 746-7475

**County:** Warren

**Application** 

Complete Date: December 1, 2008 R1
Issuance Date: December 21, 2007
Revision Date: February 5, 2009
Expiration Date: December 21, 2017

John S. Lyons, Director Division for Air Quality

Revised 05/07/07

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 01 (CO1 & EC1) E-Coat curing oven, and E-coat dip tank

**<u>Description:</u>** Used to coat automotive frames and cradles. Then the coated parts are cured is two stage curing oven

Construction Date: 9/1/2004

Controls: None -Cure oven:

Burner #1 – Maxon Model # 487M Burner #2 – Maxon Model # 445

Fuel Input: 13.0 mmBtu/hr Primary Fuel: Natural Gas- fired

-Dip tank

Model: PPG Frame Coat 3001(Dual-Part coating)

Applicator capacity: 82.0 gals/hr

Primary Raw Material input: Steel automotive frames

# **APPLICABLE REGULATIONS**

They are no applicable regulations apply to this emission point other than the general applicable requirements.

## 1. **Operating Limitations:**

N/A

#### 2. Emission Limitations:

N/A

# 3. <u>Testing Requirements</u>:

N/A

#### 4. **Monitoring Requirements:**

The permittee shall monitor and maintain records of the monthly natural gas usage rate in million cubic feet.

#### 5. Recordkeeping Requirements:

- a. A fuel usage log shall be kept and show the amount of fuel used each month. The fuel usage shall be expressed in million cubic feet.
- b. All logs shall be kept on site for five (5) years from the date of last entry and shall be made available, upon request, for inspection by the Cabinet.
- c. See Section C, General Conditions.

#### 6. Reporting Requirements:

See General Conditions Section C (3).

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

**Emission Unit 02 (BO1) E-Coat Boiler (indirect heat exchanger)** 

**Description:** New Indirect Heat Exchanger

Model: Rites Boiler Model #1250WG Serial #29507

Construction Date: 9/1/2004 Fuel Input: 12.4 mmBtu/hr Primary Fuel: Natural Gas

#### **Applicable Regulations:**

401 KAR 59:015, New Indirect Fired Heat Exchangers, applies to the particulate matter and sulfur dioxide emissions from the combustion of natural gas

Regulation 401 KAR 60:005, incorporating by reference Regulation 40 CFR 60, Subpart Dc Standards of performance for small industrial-commercial-industrial steam generating units, for less than or equal to 100 MMBTU/hour but greater than or equal 10 MMBTU/hour commenced after June 9, 1989

#### 1. Operating Limitations:

None

#### 2. <u>Emission Limitations</u>:

- a. Pursuant to 401 KAR 59:015, Section 4(1), particulate emissions shall not exceed 0.56 lb/mmBtu.
- b. Pursuant to 401 KAR 59:015, Section 4(2), visible emissions shall not exceed 20% opacity based on a six-minute-average.
- c. Pursuant to 401 KAR 59:015, Section 5(1), sulfur dioxide emissions shall not exceed 2.746 lbs/mmBtu based on a twenty-four-hour average. Compliance is assumed when burning Natural Gas.

Compliance demonstration:

Compliance is assumed when burning Natural Gas.

## 3. <u>Testing Requirements</u>:

Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the division

#### 4. Monitoring Requirements:

The permittee shall monitor and maintain records of the following information:

- a The total monthly fuel usage rate.
- b. The total monthly hours of operation (hours operated per month) of the boiler.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

# 5. Recordkeeping Requirements:

See Specific Monitoring Requirements above

# 6. Reporting Requirements:

See General Conditions Section C (3).

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

#### **GROUP REQUIREMENTS:**

#### Emission Unit 03 (ROW 01- 575) 575 Robotic Welders:

<u>Description</u>: The emission points are 575 units Robotic welders which use steel welding wire. The Robotic Welders are permitted as a group. Emissions go through one of 31 identical stacks

Model: Gas Metal Arc Welders Construction Date: 9/1/2004

Raw material used: ER carbon steel weld wire

Primary Fuel: N/A

## **Applicable Regulations:**

401 KAR 59:010. New process operations. Applicable to visible and particulate emissions from each emission point (listed above) commenced on or after July 2, 1975 as follows:

#### 1. **Operating Limitations:**

None

#### 2. Emission Limitations:

a. Opacity Standard: 401 KAR 59:010, Section 3 (1), visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A 40 CFR 60.

Compliance demonstration: the permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points 4. Monitoring Requirements and 5. Recordkeeping Requirements below.

b. Mass Emission Standard for particulate emissions from all emission points: 401 KAR 59:010, Section 3 (2), hourly particulate emissions for each emission point as measured by Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

$$E = 3.59 P^{0.62}$$

Where E is the particulate emission in lbs/hour and P is the process weight (i.e. the maximum amount of solid scraps/wastes produced or maximum amount of output product) in tons/hour. If the process weight is less than or equal to 0.5 ton/hour, the particulate matter emission limitation shall be 2.34 lbs/hour.

Compliance demonstration: The permittee is assumed to be in compliance as determined by the information submitted in the application. If the materials or the process rate change and result in increasing particulate emission above the limit calculated by the above equation, the permittee shall notify the Division immediately.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS

#### 3. Testing Requirements:

None

## 4. **Monitoring Requirements:**

- a. Opacity Standard: To provide reasonable assurance that the visible emission limitations are being met, the permittee shall:
  - i. Perform a qualitative visual observation of the opacity of emissions from each stack/vent on a weekly basis and maintain a log of the observation. The log shall note:
    - 1) Whether any air emissions (except for water vapor) were visible from the vent/stack,
    - 2) All emission points from which visible emissions occurred, and
  - ii. Determine the opacity of emissions by Reference Method 9 if visible emissions from any stack/vent are observed.
- b. Mass Emission Standard for particulate emissions from all emission points: To provide reasonable assurance that the particulate matter emission limitations are being met, the permittee shall monitor the relevant operating parameters, including:
  - i. The monthly rate of welding wire usage.
  - ii. The monthly total hours of operation.

#### 5. Recordkeeping Requirements:

- a. The permittee shall maintain a log of qualitative visual observations performed. The log shall note:
  - i. Whether any air emissions (except for water vapor) were visible from the vent/stack.
  - ii. All emission points from which visible emissions occurred.
- b. In addition, the permittee shall keep records of the relevant operating parameters including:
  - i. The monthly rate of welding wire usage.
  - ii The monthly total hours of operation.

#### 6. Reporting Requirements:

Please refer to reporting requirements in Section C.3.

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# SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS AND OPERATING CONDITIONS

### Emission Unit 04 (GO 1 &2) Caterpillar Diesel Generators 01-02

Model:

Power rating Input rate 250 ekW (335 hp) 19.1 gal/hr 400 ekW (536 hp) 29 gal/hr Construction Date: 9/1/2004

Fuel Input: 0.0481 1000gal/hr

Primary Fuel: Diesel fuel

# **Applicable Regulations:**

There are no application requirements to these units other that the general application requirements

## 1. **Operating Limitations**:

N/A

#### 2. Emission Limitations:

N/A

### 3. Testing Requirements:

N/A

## 4. **Monitoring Requirements**:

The permittee shall monitor and maintain monthly records of fuel oil usage.

#### 5. Recordkeeping Requirements:

- a A fuel usage log shall be kept and show the amount of fuel and hours of operation used each month. The fuel usage shall be expressed in gallons.
- b. All logs shall be kept on site for five (5) years from the date of last entry and shall be made available, upon request, for inspection by the Cabinet.
- c. See Section C.

#### 6. Reporting Requirements:

Please refer to reporting requirements in Section C.3.

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### **SECTION C - GENERAL CONDITIONS**

### 1. Administrative Requirements

a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1) (b) and is grounds for enforcement action including but not limited to the termination, revocation and re-issuance, or revision of this permit.

- b. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15].
- c. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- d. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, re-issuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Section 1a-4, 5, of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- e. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- f. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].
- g. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in 401 KAR 50:038, Air emissions fee. The permittee shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
- h. All previously issued permits to this source at this location are hereby null and void.

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# **SECTION C - GENERAL CONDITIONS (CONTINUED)**

# 2. Recordkeeping Requirements

a. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f) and Section 1b-IV-2 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].

b. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

# 3. Reporting Requirements

- a. (1) In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
  - (2) The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition a.(1) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Section 1b-V-3 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- b. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the permit [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing State-Origin Permits* incorporated by reference in 401 KAR 52:040 Section 23].
- c. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. The summary reports

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## **SECTION C - GENERAL CONDITIONS (CONTINUED)**

are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

## 4. <u>Inspections</u>

In accordance with the requirements of 401 KAR 52:040, Section 3(1) (f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency:

- a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.
- b. To access and copy any records required by the permit.
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

# 5. Emergencies/Enforcement Provisions

- a. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the Cabinet Provisions and Procedures for Issuing State-Origin Permits incorporated by reference in 401 KAR 52:040 Section 23].
- b. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- c. Emergency provisions listed in General Condition 5.b are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
- d. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

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# **SECTION C - GENERAL CONDITIONS (CONTINUED)**

# 6. Compliance

a. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:

- (1) Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.
- b. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
  - (1) Identification of the term or condition;
  - (2) Compliance status of each term or condition of the permit;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The method used for determining the compliance status for the source, currently and over the reporting period, and
  - (5) For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
  - (6) The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality

Division for Air Quality

Bowling Green Regional Office Central Files

1508 Western Ave 200 Fair Oaks Lane 1<sup>st</sup> Floor Lane

Bowling Green, KY 42104-3356 Frankfort, KY 40601-1403

c. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:

- (1) Applicable requirements that are included and specifically identified in this permit; or
- (2) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].

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# **SECTION C - GENERAL CONDITIONS (CONTINUED)**

# 7. <u>New Construction Requirements</u>:

1. Pursuant to 401 KAR 52:040, Section 12(3), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or is not completed within a reasonable timeframe, then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon a written request, the cabinet may extend these time periods if the source shows good cause.

- 2. Pursuant to State Regulations 401 KAR 52:040, Section 12(4)(a) and 401 KAR 59:005, General provisions, Section 3(1), within 30 days following construction commencement, within 15 days following start-up and attainment of maximum production rate, or within 15 days following the issuance date of this permit, whichever is later, the owner and/or operator of the affected facilities specified on this permit shall furnish to Division for Air Quality's Regional Office listed on the title page of this permit, with a copy to the Division's Frankfort Central Office, the following:
  - a. Date when construction commenced, (See General Condition G.1).
  - b. Start-up date of each of the affected facilities listed on this permit.
  - c. Date when maximum production rate was achieved, (See General Condition G.3.b).
  - d. Summary reports, as referenced in Section C, C.3., of any monitoring required by this permit, for emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.
  - e. The annual compliance certification, as referenced in Section C, F.2., for an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the compliance certification, shall indicate that the unit was under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
- a. Pursuant to State Regulation 401 KAR 59:005, General provisions, Section 2(1), this permit shall allow time for the initial start-up, operation and compliance demonstration of the affected facilities listed herein. However, within 60 days after achieving the maximum production rate at which the affected facilities will be operated, but not later than 180 days after initial start-up of such facilities, the owner or operator shall demonstrate compliance to a duly authorized representative of the Division.
  - b. Pursuant to State Regulation 401 KAR 59:005, General provisions, Section 3(1)(b), unless notification and justification to the contrary are received by this Division, the date of achieving the maximum production rate at which the affected facilities will be operated shall be deemed to be 30 days after initial start-up.
  - c. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1.(1), at least 30 days prior to the date of the required performance test(s) for any piece of equipment utilizing a control device which requires performance test(s) to demonstrate compliance, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort office. The protocol form shall be utilized by the Division to determine if a pretest meeting is

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# **SECTION C - GENERAL CONDITIONS (CONTINUED)**

required. Pursuant to 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least 10 working days prior to the test(s).

- d. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.
- 4. Operation of the affected facilities authorized by this permit shall not commence until compliance with applicable standards specified herein has been demonstrated in accordance with the requirements of 401 KAR 52:040, Section 12(4) (b).

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# **SECTION D - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

	<u>Description</u>	Generally Applicable Regulation
1.	Sludge Dryer	59.010
2.	Manual Welders (01-62)	59.010
3.	Roof Top Units (01-14)	59:010
4.	Acid Pickle Tank (Tank #5)	59:010
5.	Water Scrubber on Pickle Tank	
	(Indoor air quality control)	None